



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,738	08/03/2001	Takahiro Norimatsu	109828	5067

25944 7590 12/19/2002

OLIFF & BERRIDGE, PLC  
P.O. BOX 19928  
ALEXANDRIA, VA 22320

EXAMINER
----------

FAISON, VERONICA F

ART UNIT	PAPER NUMBER
----------	--------------

1755

DATE MAILED: 12/19/2002

6

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/920,738

Applicant(s)

NORIMATSU ET AL.

Examiner

Veronica F. Faison

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other:

## **DETAILED ACTION**

### ***Specification***

The disclosure is objected to because of the following informalities: Throughout the specification Applicant recites the terms "alkylethers", "glycol-n-butyl", and "glycol-n-propyl". It is the position of that this should be --alkyl ethers--and that the "-" between glycol and n-butyl or n-propyl should be deleted.

Appropriate correction is required.

### ***Claim Objections***

Claims 1, 3-8, 10 and 16-20 are objected to because of the following informalities:

Claims 1, 3-8, 10 and 16-20 recite the term "alkylethers". It is the position of that this should be --alkyl ethers--.

Claims 17-20 recite the terms "glycol-n-butyl", and "glycol-n-propyl". It is the position of the Examiner that the "-" between glycol and n-butyl or n-propyl should be deleted.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-15 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yatake (US Patent No. 6,004,389) in view of Goto et al (US Patent 6,048,914).

Yatake (US Patent No. 6,004,389) teaches an ink composition comprising a pigment, water and a glycol ether selected from the group consisting of diethylene glycol mono-m-butyl ether, triethylene glycol mono-n-butyl ether, propylene glycol mono-n-butyl ether and dipropylene glycol mono-n-butyl ether (abstract and col. 3 lines 13-21). The pigment may be present in the ink composition in the amount of 2 to 15 percent by weight (col. 3 lines 56-57). The ink composition may further comprise a water-soluble organic solvent such as ethylene glycol monobutyl ether, diethylene glycol mono-t-butyl ether and propylene glycol mono-t-butyl ether, dipropylene glycol monomethyl ether present in the amount of 5 to 60 percent by weight (col. 4 line 64-col. 5 line 23). Water is present in the amount to make up the remaining balance of the ink composition which overlaps Applicant's claimed range (See examples). The reference further teaches that various additives such as surfactants, antiseptic agents, pH adjustors and surface tension modifiers may be present in the ink composition (col. 5 line 26-col. 6 line 33). The ink composition may also comprise a dye selected from a direct, acid, basic, reactive and food dye (col. 6 lines 34-39). Yatake discloses that a surfactant and/or a regulated polymerization type water-soluble resin may be used to further accelerate or stabilize the dispersion of the pigment (col. 15 lines 14-19). Yatake fails to teach polypropylene glycol n-butyl ether having three or more oxypropylenes.

Goto et al teaches ink composition comprising glycol ethers such as propylene glycol monobutyl ether, dipropylene glycol monobutyl ether, and tripropylene glycol monobutyl ether.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have replaced propylene glycol mono-n-butyl ether with tripropylene glycol monobutyl ether because the substitution of art recognized equivalents as shown by Goto et al would have been within the level of ordinary skill in the art.

Claims 1-9,11, 12, 15-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yatake (US Patent No. 5,560,770) in view of Goto et al (US Patent No. 6,048,914).

Yatake (US Patent No. 5,560,770) teaches an ink composition comprising a dye, propylene glycol mono-n-butyl ether and/or dipropylene glycol mono-n-butyl ether and a water-soluble glycol ether other than propylene glycol mono-n-butyl ether and dipropylene glycol mono-n-butyl ether (abstract and col. 2 lines 40-49). The propylene glycol mono-n-butyl ether and/or dipropylene glycol mono-n-butyl ether may be present in the amount of 3 to 30 percent by weight (col. 2 lines 40-42). The water-soluble glycol which may be used in the ink composition include ethylene glycol monomethyl ether, ethylene glycol monobutyl ether, diethylene glycol mono-t-butyl ether, triethylene glycol monobutyl ether which may be present in the amount of 5 to 60 percent by weight (col. 2 line 65-col. 3 line 30). The reference further teaches that various additives such as antiseptic agents, pH adjustors and viscosity modifiers may be present in the ink

Art Unit: 1755

composition (col. 5 lines 6-31). The dye of the present in the ink composition may be selected from direct, acid, basic, reactive or food dyes (col. 5 lines 32-34). Water is present in the amount to make up the remaining balance of the ink composition which overlaps Applicant's claimed range (See examples). Yatake fails to teach polypropylene glycol n-butyl ether having three or more oxypropylenes.

Goto et al teaches ink composition comprising glycol ethers such as propylene glycol monobutyl ether, diethylene glycol monobutyl ether, and tripropylene glycol monobutyl ether.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have replaced diethylene glycol mono-n-butyl ether with tripropylene glycol monobutyl ether because the substitution of art recognized equivalents as shown by Goto et al would have been within the level of ordinary skill in the art.

### ***Conclusion***

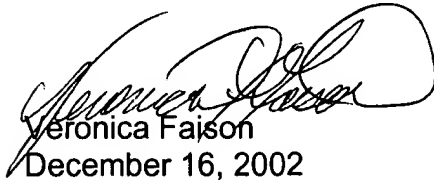
The remaining references listed on forms 892 and 1449 have been reviewed by the Examiner and are considered to be cumulative to or less material than the prior art references relied upon in the above rejections.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 703-305-3918. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

Art Unit: 1755

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 703-308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

  
Veronica Faison  
December 16, 2002

  
Mark L. Bell  
Supervisory Patent Examiner  
Technology Center 1700